

Amendments to the Claims:

Please amend the claims as follows, canceling the claims marked as cancelled, without prejudice.

1-39. (Cancelled)

40. (New) A three-dimensional printing system, comprising:

a printing apparatus to print three-dimensional objects, wherein said printing apparatus comprises:

a printing head;

a cartridge apparatus to provide modeling material to print said objects;

a sensor to determine the status of modeling material in said cartridge apparatus; and

a controller to control said printing apparatus, to receive data from said sensor, and to control switching of material supply sources from one cartridge apparatus to another.

41. (New) The system of claim 40, wherein said sensor comprises also part of said cartridge apparatus.

42. (New) The system of claim 40, wherein the sensor is a mass sensor.

43. (New) The system of claim 40, wherein said cartridge apparatus comprises a cartridge array.

44. (New) The system of claim 40, wherein said cartridge apparatus comprises a cartridge casing, said casing including a memory device reader.

45. (New) The system of claim 40, wherein said cartridge apparatus comprises a memory device to record data relating to modeling material in a cartridge.

46. (New) The system of claim 40, wherein said cartridge apparatus comprises a bag to store said modeling material.

47. (New) The system of claim 40, wherein said printing apparatus includes a valve matrix connecting said printing apparatus to said cartridge apparatus, to control supply of modeling materials from said cartridge apparatus to said printing apparatus.

48. (New) The system of claim 47, wherein said valve matrix includes an outgoing tube for each type of material required by said printing apparatus.

49. (New) The apparatus of claim 47, wherein upon lowering of the level of said material in any one cartridge in said array of cartridges to a pre-determined amount, said valve matrix is adapted to automatically switch material sources.

50. (New) The system of claim 40, wherein said controller is to calculate material parameters from materials in one or more cartridge apparatuses, based on data of modeling material in said cartridge apparatus.

51. (New) The system of claim 40, further comprising a source of electromagnetic radiation

52. (New) The system of claim 51, wherein the source of electromagnetic radiation is disposed within said cartridge apparatus.

53. (New) The system of claim 40, further comprising a curing unit adapted to cure three-dimensional printing material within said cartridge apparatus using electromagnetic radiation.

54. (New) The system of claim 40, wherein said printing apparatus is to inflate a cartridge bag and to cure material within a cartridge apparatus.

55. (New) A printing method, comprising:  
measuring data on the status of three-dimensional modeling material in a modeling material source;  
determining parameters of said modeling material; and  
controlling a supply of said modeling material from two or more said material sources according to said parameters

56. (New) The method of claim 55, wherein said controlling of material supply is enabled by controlling a valve matrix.

57. (New) The method of claim 55, further comprising sending an alert to an operator.

58. (New) The method of claim 55, wherein measuring material status includes measuring the mass of said modeling material in a printing cartridge.

59. (New) The method of claim 55, comprising computing an amount of modeling material required to print an object.

60. (New) The method of claim 55, comprising computing an amount of time remaining before a printing cartridge requires replacement.

61. (New) The method of claim 55, comprising alerting an operator if a printing cartridge requires replacement.

62. (New) The method of claim 55, comprising automatically switching supply sources for said modeling material if a printing cartridge requires replacement.

63. (New) A method comprising:  
generating electromagnetic radiation;  
channeling said electromagnetic radiation into a printing cartridge;  
curing three dimensional modeling material contained within said cartridge; and  
controlling said generating, channeling and curing from a three dimensional printer.

64. (New) The method of claim 24, comprising inflating a cartridge bag to enable said electromagnetic radiation to reach substantially all parts of said cartridge bag.